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Park

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(54) **BLOOD VESSEL SIZING DEVICE**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

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3,812,842 A	5/1974	Rodriguez
4,061,924 A	12/1977	Jacoby et al.
4,506,676 A	3/1985	Duska
5,150,292 A	9/1992	Hoffmann et al.
5,193,106 A	3/1993	DeSena
5,216,700 A	6/1993	Cherian
5,400,513 A	3/1995	Duffield

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This patent is subject to a terminal disclaimer.

FOREIGN PATENT DOCUMENTS

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CN	203436327 U	2/2014
WO	2010064049 A1	6/2010

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OTHER PUBLICATIONS

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(Continued)

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(57)

ABSTRACT

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Medical devices and methods for determining the size of blood vessels are disclosed. In an embodiment, a blood vessel sizing device includes a marker configured for placement on the skin of a patient. The marker defines a substantially circular shape and includes a plurality of radiopaque substantially concentric circles. In an embodiment, a blood vessel sizing method includes placing a marker having a plurality of substantially concentric circles on the skin of a patient, imaging a blood vessel of the patient and the marker, and comparing the imaged blood vessel to the imaged circles to determine the blood vessel size.

(58) **Field of Classification Search**

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See application file for complete search history.

15 Claims, 2 Drawing Sheets

